

Remarks

Applicant traverses the Examiner's rejection of Claim 9 as anticipated by Lucidarme (FR2746991) under 35 U.S.C. 102(b). As an aside, Applicant notes that Lucidarme corresponds to Australian Patent Publication 2512097. Both the French and Australian Lucidarme references were cited in the corresponding International Search Report. In addition, Applicant notes corresponding U.S. Patent No. 6,823,177, of which a copy is enclosed herewith.

Lucidarme discloses a radio station comprising two antennas associated with hybrid polarizing couplers on transmission. Besides, a distribution hybrid coupler, receiving a radio signal from a source, has outputs connected to respective inputs of the hybrid polarizing couplers. Such arrangement allows the transmission of a circularly polarized field.

On reception, the waves picked up in order to produce the processed signals are linearly polarized. The receiver provides spatial diversity processing and linear polarization diversity processing in order to counteract channel fading.

In order to separate the transmitting and receiving paths, the antennas of the radio communication stations are associated with duplexers. These duplexers are each connected between an antennas and the corresponding polarizing coupler (see Figures of Lucidarme).

By contrast, Claim 9 of the present invention recites that the receiver of the radio station is arranged so as to combine several input radio signals obtained from respective inputs of the hybrid polarizing couplers associated with the antennas. Moreover, the antennas are placed so as to radiate toward diametrically opposite sectors.

By virtue of this arrangement, the receiver of the claimed radio station is capable of processing several signals picked up on diametrically opposite sectors, these signals being

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obtained by mixing, in the hybrid couplers, different components of the electric field picked up by the antennas. The result of this is some smoothing of the perturbations which can affect these components, and therefore less sensitivity of the receiver to these perturbations (see page 2, lines 18-26 of the present application).

As mentioned above, the receiver of the Lucidarme is arranged so as to combine several input radio signals obtained directly from the duplexers associated with the antennas, and not several input radio signals obtained from respective inputs of the hybrid polarizing couplers associated with the antennas (see Fig.1 of Lucidarme for instance). Moreover, Lucidarme does not disclose that the antennas would be placed so as to radiate toward diametrically opposite sectors.

Therefore, the above-mentioned smoothing of the perturbations cannot be obtained with the arrangement of Lucidarme.

The subject-matter of Claim 9 is thus new and non-obvious over Lucidarme. Claims 10-16 are acceptable as well, in particular since they depend on Claim 9 directly or indirectly.

Applicant respectfully traverses the Examiner's statement at paragraph 6 of page 3 of the Office Action, indicating that the Information Disclosure Statement filed March 28, 2005 failed to comply with 37 C.F.R. §1.98(a)(1). Applicant notes the detailed comments provided in the Remarks section of the Amendment filed December 8, 2004. In addition, the undersigned notes that Examiner William Trost confirmed that the references in the International Search Report should have been considered and that he will instruct the Examiner to issue a Supplemental Action confirming that the references have been considered.

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Applicant notes that on the Office Action Summary, at Paragraph No. 10, the Examiner has checked the box indicating that the Examiner has objected to the Drawings filed December 13, 2004. However, at Paragraph No. 11 of page 20, the Examiner indicates that the Drawings received on December 13, 2004 are approved. Applicant believes that the incorrect box was checked on the Office Action Summary Sheet and believes that the Drawings submitted have been approved.

In view of foregoing comments, Applicant respectfully requests the Examiner's reconsideration and to find Claims 9-16 allowable over the prior art of record.

Respectfully submitted,


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